

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT :

Zhou, Ming-Ming et al.

SERIAL NO. :

EXAMINER :

Not Yet Assigned

FILED:

February 16, 2001 ART UNIT

Not Yet Assigned

FOR

METHODS OF IDENTIFYING MODULATORS OF

BROMODOMAINS

09/784,553

# CERTIFICATE OF MAILING UNDER 37 CFR 1.8

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Anne M. Jones

(Name of Person Depositing Mail)

(Signature and Date)

## PRELIMINARY AMENDMENT

# ASSISTANT COMMISSIONER FOR PATENTS WASHINGTON, D.C. 20231

Dear Sir:

Please enter the following amendments into the present application.

#### IN THE DRAWINGS:

Please delete Figure 13-1 through 13-13 without prejudice or disclaimer.

#### IN THE SPECIFICATION:

Please substitute the following amended paragraph for the paragraph on page 10, lines 19-25:

In a preferred embodiment the compound is selected by performing rational drug design with the set of atomic coordinates obtained from one or more of Tables 1-5 and 10-14. More preferably the selection is performed in conjunction with computer modeling. Compounds selected by these methods are also part of the present invention. Preferably the compound is a small organic molecule. More preferably the compound is an analog of acetyl-lysine. Even more preferably, the compound is not included in Table 15-1 to 15-33.

Please substitute the following amended paragraph for the paragraph starting on page 10, line 25 and ending on page 11, line 19:

The present invention also provides methods of identifying a compound that modulates the stability of the binding complex formed between P/CAF and Tat that is acetylated at the lysine residue at position 50 of SEQ ID NO:45. In one such embodiment the method comprises contacting the bromodomain of P/CAF or a fragment thereof with a binding partner in the presence of the compound under conditions in which the bromodomain of P/CAF and the binding partner bind in the absence of the compound. The stability of the bromodomain of P/CAF and the binding partner is then determined (e.g., measured). When there is a change in the stability of the binding complex between the bromodomain of P/CAF and the binding partner in the presence of the compound, the compound is identified as a modulator. In one embodiment of this type the binding partner is Tat that is acetylated at the lysine residue at position 50 of SEQ ID NO:45. In a preferred embodiment the binding partner is a fragment of Tat comprising an acetyl-lysine at position 50. In still another embodiment the binding partner is an analog of the fragment of Tat comprising an acetyl-lysine at position 50. When the stability of the bromodomain of P/CAF for the binding partner increases in the presence of the compound, the compound is identified as a stabilizing agent, whereas when the stability of the bromodomain of P/CAF for the binding partner decreases in the presence of the compound, the compound is identified as an inhibitor of the Tat-P/CAF complex. In a preferred embodiment the compound is selected by performing rational drug design with the set of atomic coordinates obtained from one or more of Tables 1-5 and 10-14. More preferably the selection is performed in conjunction with computer modeling. Compounds identified by these methods are also part of the present invention. Preferably the compound is an analog of acetyl-lysine. More preferably the compound is a small organic molecule not included in Table 15-1 to 15-33.

Please substitute the following amended paragraph for the paragraph starting on page 11, line 27 and ending on page 12, line 2:

Another aspect of the present invention provides methods of preventing, and/or retarding the progression and/or treating HIV infection in an individual. One such method employs administering to the individual compounds that modulate the Tat-P/CAF complex selected by performing rational drug design with the set of atomic coordinates obtained from one or more of Tables 1-5 and 10-14. In a preferred embodiment the compound administered is an acetyl-lysine

analog. In a particular embodiment this compound is a small organic molecule contained in Table 15-1 to 15-33. Preferably the compound either de-stabilizes or inhibits the Tat-P/CAF complex.

Please substitute the following amended paragraph for the paragraph on page 16, line 19 through line 24:

Figure 12 depicts the chemical structure common to the acetyl-lysine analogs of the present invention. R<sub>1</sub>, R<sub>2</sub>, and R<sub>3</sub> can be H, CH<sub>3</sub>, a halogen (e.g., F, Cl, Br, I etc.), OH, SH, or NH<sub>3</sub><sup>+</sup>. R4 can be an alkyl (including a peptide/protein attached thereto such as a peptide comprising an acetyl-lysine in which the "N" of the structure depicted is the epsilon nitrogen (i.e., N<sup>6</sup>) of a lysyl residue), or an aryl group. See also Table 15-1 to 15-33 for examples.

Please delete line 26 on page 16.

Please substitute the following amended paragraph for the paragraph on page 20, line 11 through line 25:

The present invention provides the first detailed structural information regarding a bromodomain and a bromodomain complexed with its acetylated binding partner. The present invention therefore provides the three-dimensional structure of the bromodomain and a bromodomain acetylated binding partner complex. Since the interaction of the bromodomain with a histone for example, can play a significant role in chromatin remodeling/regulation, the structural information provided herein can be employed in methods of identifying drugs that can modulate basic cell processes by modulating the transcription. In a particular embodiment, the three-dimensional structural information is used in the design of a small organic molecule for the treatment of cancer or as disclosed below, HIV-1 infection and/or AIDs. In addition, the present invention provides a critical structural feature for a class of inhibitors (acetyl-lysine analogs) of the interaction between bromodomains and their protein binding partners which contain an acetylated-lysine (e.g., Tat with P/CAF), see Figure 12, as well as a compilation of compounds that share this critical feature, see Table 15-1 to 15-33.

Please substitute the following amended paragraph for the paragraph on page 24, line 25 through line 28:

As used herein the term "acetyl-lysine analog" is used interchangeably with the term "analog of acetyl-lysine" and is a compound that contains the acetyl-amine-like structure as depicted in Figure 12. Examples of acetyl-lysine analogs are included in Table 15-1 to 15-33.

Please substitute the following amended paragraph for the paragraph on page 44, line 11 through line 17:

Initially a potential drug could be obtained by screening a random peptide library produced by recombinant bacteriophage for example, [Scott and Smith, Science, 249:386-390 (1990); Cwirla et al., Proc. Natl. Acad. Sci., 87:6378-6382 (1990); Devlin et al., Science, 249:404-406 (1990)] or a chemical library. In particular, based on the NMR structural analysis provided herein, compounds that comprise an "acetyl-amine-like" structure as depicted in Figure 12 are particularly good candidates. Examples of such "acetyl-lysine analogs" are included in Table 15-1 to 15-33.

Please substitute the following amended paragraph for the paragraph starting on page 55, line 28, through line 4 on page 56:

According to the invention, the component or components of a therapeutic composition, e.g., an agent of the invention that interferes with the bromodomain-acetyl-lysine binding complex such as the peptide having the amino acid sequence of SEQ ID NOs:4, 5, 6, 46, or 47, or an acetyl-lysine analog as defined by Figure 12 and exemplified in Table 15-1 to 15-33, and a pharmaceutically acceptable carrier, may be introduced parenterally, transmucosally, e.g., orally, nasally, or rectally, or transdermally. Preferably, administration is parenteral, e.g., via intravenous injection, and also including, but is not limited to, intra-arteriole, intramuscular, intradermal, subcutaneous, intraperitoneal, intraventricular, and intracranial administration.

Please insert Table 15-1 to 15-33, attached hereto as Table 15-1 through 15-33, into the specification after page 83 and before the claims.

#### IN THE CLAIMS:

Please cancel claims 37 through 43 without prejudice or disclaimer.

Please substitute the following amended claims for the original claims having the same claim number:

- 29. (Amended) A compound that is a small organic molecule identified by the method of Claim 28; wherein said compound is an analog of acetyl-lysine, but with the proviso that the compound is not included in Table 15-1 to 15-33.
- 34. (Amended) A compound that is a small organic molecule identified by the method of Claim 33; wherein said compound is an analog of acetyl-lysine, but with the proviso that the compound is not included in Table 15-1 to 15-33.
- 35. (Amended) An agent that can modulate the binding of P/CAF and Tat; wherein said agent is an analog of acetyl-lysine, but with the proviso that the agent is not included in Table 15-1 to 15-33.

# REMARKS

Claims 1-43 are pending. Claims 37-43 have been cancelled without prejudice or disclaimer. Claims 29, 34 and 35 have been amended. Thus, claims 1-36 remain under consideration.

The amendments to the specification and claims were rendered to clarify aspects of the invention. Table 15-1 to 15-33 presents identical data to that originally included in Figure 13, which has now, accordingly, been deleted. No New Matter has been added by way of these amendments.

A Petition for Correction of Inventorship is attached herein in accordance with 1.48(b). This correction is respectfully requested in light of the claims cancelled by way of this amendment.

Attached hereto is a marked-up version of the changes made to the specification and the claims by the current amendment. The attachment is captioned "Version with markings to show changes made."

# Conclusion

Examination on the merits is respectfully requested.

Respectfully submitted,

Veronica Mallon, Ph.D. Agent for Applicants

vica Mallon

Registration No. 52,491

KLAUBER & JACKSON 411 Hackensack Avenue Hackensack, New Jersey 07601

Date: April 7, 2003

Attachment: Table 15-1 to 15-33

Petition for Correction of Inventorship

### VERSION WITH MARKINGS TO SHOW CHANGES MADE

### IN THE SPECIFICATION:

The following amended paragraph will replace the original paragraph on page 10, lines 19-25:

In a preferred embodiment the compound is selected by performing rational drug design with the set of atomic coordinates obtained from one or more of Tables 1-5 and 10-14. More preferably the selection is performed in conjunction with computer modeling. Compounds selected by these methods are also part of the present invention. Preferably the compound is a small organic molecule. More preferably the compound is an analog of acetyl-lysine. Even more preferably, the compound is not included in [Figure 13] Table 15-1 to 15-33.

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2459-1:003CIP

is selected by performing rational drug design with the set of atomic coordinates obtained from one or more of Tables 1-5 and 10-14. More preferably the selection is performed in conjunction with computer modeling. Compounds identified by these methods are also part of the present invention. Preferably the compound is an analog of acetyl-lysine. More preferably the compound is a small organic molecule not included in [Figure 13] Table 15-1 to 15-33.

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Line 26 on page 16 has been deleted:

[Figure 13 depicts examples of acetyl-lysine analogs. [PRIOR ART]]

The following amended paragraph will replace the original paragraph on page 20, line 11 through line 25:

The present invention provides the first detailed structural information regarding a bromodomain and a bromodomain complexed with its acctylated binding partner. The present

invention therefore provides the three-dimensional structure of the bromodomain and a bromodomain acetylated binding partner complex. Since the interaction of the bromodomain with a histone for example, can play a significant role in chromatin remodeling/regulation, the structural information provided herein can be employed in methods of identifying drugs that can modulate basic cell processes by modulating the transcription. In a particular embodiment, the three-dimensional structural information is used in the design of a small organic molecule for the treatment of cancer or as disclosed below, HIV-1 infection and/or AIDs. In addition, the present invention provides a critical structural feature for a class of inhibitors (acetyl-lysine analogs) of the interaction between bromodomains and their protein binding partners which contain an acetylated-lysine (e.g., Tat with P/CAF), see Figure 12, as well as a compilation of compounds that share this critical feature, see [Figure 13] Table 15-1 to 15-33.

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The following amended paragraph will replace the original paragraph starting on page 55, line 28, through line 4 on page 56:

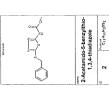
According to the invention, the component or components of a therapeutic composition, e.g., an agent of the invention that interferes with the bromodomain-acetyl-lysine binding complex such as the peptide having the amino acid sequence of SEQ ID NOs:4, 5, 6, 46, or 47, or an acetyl-lysine analog as defined by Figure 12 and exemplified in [Figure 13] Table 15-1 to 15-33, and a pharmaceutically acceptable carrier, may be introduced parenterally, transmucosally, e.g., orally, nasally, or rectally, or transdermally. Preferably, administration is parenteral, e.g., via intravenous injection, and also including, but is not limited to, intra-arteriole, intramuscular, intradermal, subcutaneous, intraperitoneal, intraventricular, and intracranial administration.

#### IN THE CLAIMS:

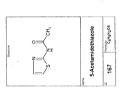
The following claims have been amended to replace the original claims having the same claim number:

- 29. (Amended) A compound that is a small organic molecule identified by the method of Claim 28; wherein said compound is an analog of acetyl-lysine, but with the proviso that the compound is not included in [Figure 13] <u>Table 15-1 to 15-33</u>.
- 34. (Amended) A compound that is a small organic molecule identified by the method of Claim 33; wherein said compound is an analog of acetyl-lysine, but with the proviso that the compound is not included in [Figure 13] <u>Table 15-1 to 15-33</u>.
- 35. (Amended) An agent that can modulate the binding of P/CAF and Tat; wherein said agent is an analog of acetyl-lysine, but with the proviso that the agent is not included in [Figure 13] <u>Table</u> 15-1 to 15-33.





Sincure	o=\( \frac{\delta}{2} \)	Melatonin	C13H16N2O2
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	3-Aceta	-

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o⇒ ₹	4 90	H <sub>8</sub> N <sub>2</sub> OS	r,
Z=ZI	cetamido- ithylthiazol	Semula	0=\\Z
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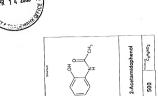
0 Y Y Y	2,2,6,6-tetramethylpiperidin	27.4 Farmitte 143,0 N.50

IN O	Acetamidoantipyrine	C13H15N3O2
H T	4-Acetamido	0

TABLE 15 - 1

CeHyN3O2 N4-Acetylcytosine 277





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, zz	4-(2-(3,4-Dimethoxy-phenyl)-acetamide	C <sub>12</sub> H <sub>17</sub> NO <sub>3</sub>
o g	N-(2-(3,4-Dir )-ethyl)-	5102090



-
Anne 2-(Acetylamino-methylene)-

,	C <sub>10</sub> H <sub>1</sub> SNO <sub>S</sub>	
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	romor C <sub>10</sub> H,	
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-ethyl)	ONSI
N-(1-Methyl-2-phenyl-ethyl) -acetamide	5100433 C11H15NO
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£ 5	N-Acetyl-5-hydroxytryptami	C12H14N2O2
	N-Acetyl-5-	4

2-(2-chloroacetamido)-4-thi azoleacetate 415 C9H11CIN2038

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Stratoire	F. S.	

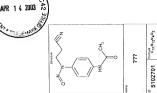
CoHeNGO3 N2,9-Diacetylguanine

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cetylamino-malonic acid diethyl ester	Firmush CgH15NOs
2-Acetylamino-malonic acid diethyl ester	5100305





TO TO	-[4-(2-Cyano-ethylamino)- phenyl]-acetamide	Formula C11H13N3O
\$ \frac{1}{2} -	-[4-(2-Cyanc phenyl]-a	5102700







N-[4-(5-Amino-1H-pyrazol-3-yl)-phenyl]-acetamide

N-[4-(2-Cyano-acetyl)-phen yl]-acetamide 5102807 FEMILIAN202

5102808 FORMA

N-(2-Ethoxy-phenyl)-aceta mide

5104364 C10H13NO2

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K-(1-Phenyl-1H-pyrazol-3-yl }acetamide 5102370 Family 11/130

55	N-(2-(4-Methoxy-phenyl)-et hyl)-acetamide	Formula H15NO2
 , y	N-(2-(4-Meti hyl)-a	5102092

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N-(4-Phenylazo-phenyl)- acetamide	5106974 hand 1,4413N30	Sheater	S. C. L.

N-(3,5-Dihydroxy-phenyl)-acetamide 5106727 Caming HgNO3

N-(4-Benzyloxy-phenyl)-acetamide 5107131 Family NO2

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yl)-acetamide	CigHigh205
yl)•a	5107835

5107835 C10H	C10H10N2OS
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0/ Lo	"N-(3-Cyano-5,6-dihydro- 4H-cyclopenta[b]thiophen- 2-yl)-acetamide	C10H10N2OS
	"N-(3-Cyano 4H-cyclopen 2-yl)-ac	5107423



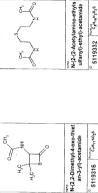


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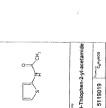












2-Fluoro-thiobenzoic acid S-(2-acetylamino-ethyl) 5119237 Cather PNO25



9	N-(2-Methanesulfinyl-ethyl)-	acetamide	5119302 Formas C. H.4NO.S
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Formus	
5119302	

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TABLE

N-Thiophen-2-yi-acetamide N-(4-Acetylamino-1-methyl-piperidin-4-yl)-acetamide





N-(2-Methylsulfanyl-ethyl)-a cetamide

5119299 Ferring







N-(5-Methyl-benzo[1,2,5]thi adiazol-4-yl)-acetamide	Formus CoHoN3OS
N-(5-Methyl-b adiazol-4-yl	5131057

5128194

5121921 C12H12N2O2

N-(2-(2-Acetylamino-ethyldi sulfanyl)-ethyl)-acetamide 5119333 CH46N2O252

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4-Acetylamino-benzenesulf onate sodium	CgHgNNaO4S	
Acetylami	5134865	

(Z)-3-(4-Acetylamino-pheny lcarbamoyl)-acrylic acid 5135478 C12H12N2O4

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sulfonylamir	phenyl)-acetamide	Formula CgH12N2O3S
N-(4-Methanesulfonylamir	phenyl)-s	5133885

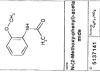
phenyl)-acetamide	Formula CgH <sub>12</sub> N <sub>2</sub> O <sub>3</sub> S	
phenyl)-	5133885	

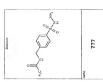
"Acetylamino-phenyl)-e y-dimethyl-ammonium chloride 5132286	4*Acetylamino-phenyl)-eth yl-dimethyl-ammonium chloride	C12H19CIN2O
	mino-pl hyl-amr	ž

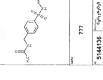














5137138 CeH16N403

5135539 Formula 712N202

N-Naphthalen-2-yl-acetamí de 5135520 C12H11NO



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	APPLE

+Benzyl-2-phenoxy-aceta mide	C15H15NO2
N-Benzyl-2-p m	5140095

Form C11H13NO2

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		4-Allyloxyacetanilide
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4-Allyloxyacetanilide	

4-(5-Acetylamino-thiophen- 2-yl)-acetamide
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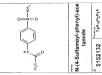
N-(5-Acetylamino-thiophen- 2-yl)-acetamide	5137797 CaH10N2O25

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5145568 Formula 11103

Shohe	· %	<u>}</u>	2



)	-(2-Methyl-quinolin-6-yl)-a cetamide	Formus C12H12N2O
Q	-(2-Methyl- cet	5150046

N-(2'-Oxo-bicyclohexyl-1-yl

5151999 Formula 14423NO2



. Ę	-2-phen ride
=0	N-(1-Hydroxy-2-oxo-2-phen yl-ethyl)-acetamide
	N-(1-Hydr yl-eth

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N-[Acetylamino-(4-fluoro-p henyl)-methyl]-acetamide



\*Z.Acetylamino-4-methyl-thiazole-5-carboxylic acid ethyl ester

5144565 CGH12N2038





5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	4-Acetylamino-benzoic acid 3-methyl-butyl ester	5161584 C4H19NO3

N"(5-Hydroxy-3-methyl-1-p henyl-1H-pyrazol-4-yl)-acet amide 5160581 Former 5160581

2-Chloro-N-(2-hydroxy-5-nit ro-benzyl)-acetamide

N°(4,5,6,7-Tetrahydro-benz o[b]thiophen-2-yl)-acetamid

5156862 COMPAGE C10H13NOS

5157409 Family CIN204









N-(8-Hydroxy-quinolin-2-yl) -acetamide 5175095 C11H10N202

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2-Acetylamino-3-(3H-imidaz ol-4-yl)-propionic acid 5163605 C3H+1N3O3

N-(9H-Xanthen-9-yl)-acetam ide 5161930 France, 13NO2





-thiophen-2-yl)-acrylic acid

N-(5-Propionyl-thiophen-2-yl)-acetamide 5190716 Comus H1028

N-(3-Diethylaminomethyl-4-hydroxy-phenyl)-acetamide

5175598 C13H20N202

(E)-2-Acetylamino-3-(5-ethy 5190720 C11H13N038

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N-(4-Phenoxy-phenyl)-acet
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N-(5-Oxo-1-phenyl-4,5-dihy dro-1H-pyrazol-3-yl)-acetamide

5192544 C11H11N302

C44H13NO2	
5191921	Annual Contract of the Contrac

5210476 Comes C14H16N20

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3-Acetylamino-nonanoic



Stratum	5	N-(4-Ethoxy-3-nitro-phenyl)
Sig	ş	N-(4-Ethoxy-

C10H12M2U4		
5211946		

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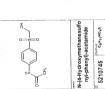
rrol-2-yl)-me amino}-phen imide	C <sub>13</sub> H <sub>13</sub> N <sub>3</sub> O
N-[4-(11-(1H-Pyrrol-2-yl)-me th-(E)-ylldene]-amino)-phen yl)-acetamide	5214576

N-[2-(1-Methyl-cyclopropyl) -phenyl]-acetamide C,2H15NO

5216286



N-(2,4-Dimethyl-6-nitro-phe 5211945 C10H12N2O3 nyl)-acetamide





f²(1-{5-[(Z)-Hydroxyimino]- -methyl-cyclohex-3-enyl}- 1-methyl-ethyl)-acetamide	thyl)-acetamide
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N-(3-Chloro-1,4-dioxo-1,4-di hydro-naphthalen-2-yl)-

acetamide

5212521 Actives 5212521

-acetamide	12H20N2O2	
yl-ethyl)-	116	

/l)-acetamide	2 <sup>H</sup> 20 <sup>N</sup> 202	
hyl-ethyl)-ace	3911 North	1



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"Furan-2-carboxylic acid (4-acetylamino-phenyl)-ami

5210612 C13H12N2O3





4	g Iz O	5-Acetylamino-isophthalic acid	5233529 France C10HgNOs
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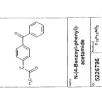
5228142 · C10H14N20 )-acetamide

N-(3-Dimethylamino-phenyl

da reprode	

N-(3-Oxo-3-phenyl-propion yl)-acetamide 5238359 FORTE 11H11NO3

<u>1</u>	_ <u>±</u>	CH <sup>2</sup>



N-[6-(Acetylamino-methyl)-pyridin-2-ylmethyl]-acetamide

5219860 C11H15N3O2

F. ST	N-Tricyclo[4.3.1.1]undec-1- yl-acetamide

C <sub>13</sub> H <sub>21</sub> NO	
5235037	

N-(3-Acetyl-2-methyl-quinol in-4-yl)-acetamide

5234425 FORTH 14N202

13H21ND	
037	







# 5-Acetylamino-2-amino-ben zenesulfonic acid









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N-[3-(2-Oxo-pyrrolidin-1-yl)-phenyl]-acetamide

N-(2-Trifluoromethyl-3H-be nzoimidazol-5-yl)-acetamid

N-{2-[(2-Hydroxy-benzoyl)-hydrazono]-propyl}-acetam ide

5238480 C12H15N3O3

5248854 C16HaF3N3O

	C,2H14N2C	
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	5249307	

N-(3-Isopropylamino-2-nitro so-phenyl)-acetamide

N-Benzo[1,2,5]oxadiazol-4-

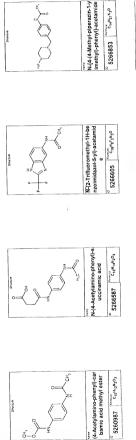
5256236 Formuly CgH7N3C2

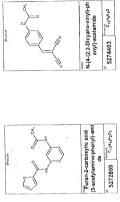
N-[4-(2-Hydroxy-ethanesulf onyl)-phenyl]-acetamide

N-(4-Morpholin-4-yl-phenyl)
-acetamide 5255410 C12H16N2O2

5255854 C10H13NO48







N-(4-Azepan-1-ylmethyl-ph enyl)-acetamide

(4-acetylamino-phenyl)-ami

5268500 C12414N202

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5269570 C15H22N20







-4-methoxy-b nide	C10H12N2O3	
3-Acetylamino-4-methoxy-b enzamide	5306005	









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Pro Co	N-(5-Chloro-2,4-dimethoxy- phenyl)-acetamide
Ψ, °	N-(5-0

C <sub>10</sub> H <sub>12</sub> CINO <sub>3</sub>		
5302797		

4-Acetylamino-N,N-diethyl-benzamide 5279673 C13418N202



5-Acetylamino-2,4-dichloro- benzamide	County Control
5-Acetylamin benz	5306181

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-(1-Acetyl-1H-[1,2,4]triazol -3-yl)-acetamide
etyl-1H-[1,2,4]t yl}-acetamide

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5313735 Francis N402



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	(2-Acety

N-(4-Amino-2-methoxy-5-m

N-(2-Methoxy-5-methyl-4-ni

tro-phenyl)-acetamide 5310579 C10H12N2O4

ethyl-phenyl)-acetamide

5311167 C10H14N2O2

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5312808	
	5312808 Formula

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N-(8-Methoxy-2,3-dimethyl-quinoxalin-5-yl)-acetamide

N:(4-([1-(5-Methyl-furan-2-y |)-meth-(E)-ylidene]-amino}-phenyl)-acetamide

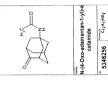
5313754 FORMAN 202

5316088 C13H15N3O2

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5323911 C12H13NO4

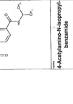














5334418 C12H16N2O2

5325303 C+1H12N2O25

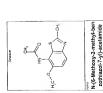


N-(4-Chloro-2,5-dimethoxy-5331993 C10H12CINO3 phenyl)-acetamide



N-(3-Hydroxy-adamantan-1-yl)-acetamide 5347923 C12H19N02

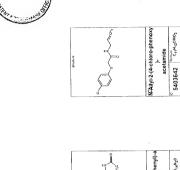






N-(7-Methylene-bicyclo[3.3. 1]non-2-en-3-yl)-acetamide 5347722 Francis C12H17NO



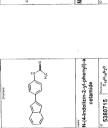






N-(4-Morpholin-4-ylmethyl-phenyl)-acetamide

5426608 C13H18N2O2



N-(6-Methyl-2,3,4,9-tetrahy dro-1H-carbazol-1-yl)-aceta

N°[2-Acetylamino-1-methyleth-(E)-ylldene]-hydrazinec arboxylic acid ethyl ester 5353737 Cahishio

5373714 C15H13N2D



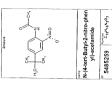
N-(4-([(2-Hydroxy-ethyl)-pr opyl-amino]-methyl}-phenyl )-acetamide	C14H22N2O2
N-(4-[[(2-Hyd opyl-amino]-n )-acet	5423275

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	N-[2-(2-Fluoro-phenoxy)-et hyl]-acetamide	
name	N-[2-(2-Fluc hyl]-a	

9	H <sub>12</sub> FNO <sub>2</sub>
nyij-acetalii	04444 C.





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Formula CaHaFNO 4-Fluoroacetanilide 548

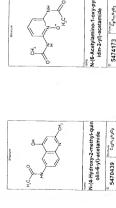
Pyridin-3-yl-carbamic acid 2-acetylamino-ethyl ester	18 C10H13N3O3
Pyridin-3 2-acetyle	5522408

Strine	0=	<b>₹</b>	IZ.	∠z >z

Fromus C<sub>3</sub>H<sub>S</sub>N<sub>S</sub>O 5510963

N-(1H-Tetrazol-5-yl)-acetan

TABLE 15 - 19







N-(4-{[1-Pyridin-4-yi-meth-(E)-yidene]-amino}-phenyl]-acetamide 5509419 C14H13N30





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( ,å	no-p stam	C13H20N2O2
·	N-(3-Dimethylamino-propyl)	FOR
ار	athy nox)	92
	Dim	5548376
U	N-(3-	55
		12





ZI \$\vec{5}{2}	N-(1-Propyl-1H-benzoimida 201-2-yl)-acetamide
	N-(1-Propy zol-2-yl

5553756 Formula 12418N30

5553166 C11H14CING3

, c====================================	2-(4-Chloro-phenoxy)-N-(2- methoxy-ethyl)-acetamide



N-(2-Methoxy-ethyl)-2-phen oxy-acetamide 5531808 Francis 11H15N03

N-(3-Methoxy-propyl)-2-phe noxy-acetamide Formate C<sub>12</sub>H<sub>17</sub>NO<sub>3</sub>

N-(3,6-Dihydro-benzo[1,2-1 d;3,4-d']bistriazol-4-yl)-acet amide

5529796 Annual Canyno

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N-(5-Phenyl-[1,3,4]oxadiazo I-2-yl)-acetamide

5549905 C10HgN3O2

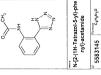
5553131 Ferral 5553131























2-Phenoxy-N-(tetrahydro-fu ran-2-ylmethyl)-acetamide 5563979 Formula C13H17N03

N-(4-Diethylamino-phenyl)-acetamide

5624080 C12H18N2O

Pyridin-4-yl-carbamic acid 2-acetylamino-ethyl ester 5561171 C10H13N3O3

2-Acetylamino-3-benzo[1,3] dioxol-5-yl-acrylic acid

5558887 C12H11NOS

N-[1-(4-Bromo-phenyl)-ethy |]-acetamide

N-[1-(3,4-Dichloro-phenyl)-e thyl]-acetamide 5583493 C10H11Cl2NO

5587422 C10H12BrNO











5652409 C10H13N5O2



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	1-1H-ben	acetamic
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N-(5-p-Tolyl-4H-[1,2,4]triazo l-3-yl)-acetamide

5656455 C11H12N40

N-[4-(3-Allyl-thioureido)-ph enyl]-acetamide

N-(5-Phenoxymethyl-[1,3,4]

5-(N'-Acetyl-guanidino)-2-a

5626440 CaM16N403 mino-pentanoic acid

thiadiazol-2-yl)-acetamide 5633778 C11H11N3O25

5634206 C12H15N308

N-(7-Hydroxy-5-methyl-[1,2, 4]triazolo[1,5-a]pyrimidin-2-yl)-acetamide

> N-(1-tert-Butyl-1H-benzoim 5655930 C13H17N3O

dazol-5-yl)-acetamide

5656027 Cangango















(E)-2-Acetylamino-3-(3-nitro -phenyl)-acrylic acid 5687268 C11H16N2Os

(Z)-2-Acetylamino-3-(4-etho xy-phenyl) acrylic acid

N.[7-0xo-4,5,6,7-tetrahydro-benzothiazol-2-yl)-acetami CgH10N2028

5674030

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5685865 C13H15NO4





5-0	4-Acetylamino-N-(2-methox y-ethyl)-benzamide
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¥.	id amino-tetra -3-yl ester
	Acetic acid R,4S)-4-acetylamino-tetra
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N-(2-Dimethylamino-ethyl)-2-(3,5-dimethyl-phenoxy)-a cetamide

N-[4-((E)-3-Chloro-but-2-en yloxy)-phenyl]-acetamide

5689801 C12H14CINO2

5690899 C14H22N2O2

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-	Acetic acid
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en-3-yl ester	CgH13NO3S	
hydro-thiophe	5728428	

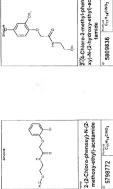
5739448 C12H16N2O3















N-(2-Hydroxy-ethyl)-2-(nap	France
hthalen-1-yloxy)-acetamide	C14H1SNO3
N-(2-Hydroxy hthalen-1-ylox	5811720

N-21-[6,6-Dimethyl-3-oxo-bi cyclo[3,1.0]hex-(2Z)-ylidene ]-ethyl)-acetamide

N-[Acetylamino-(2-chloro-p henyl)-methyl]-acetamide

5824734 C11H13CBN202

5827999 C12H17NO2

0 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -	(4"Acetylamino-benzoylami no)-acetic acid methyl ester	5740840 C12H14N2O4	Section 2	

Formula C13H18N2O3

5739629

Stretow	0 = 1	4-Acetylamino-N-(3-methox y-propyl)-benzamide

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rimidin-4-yl)-acetamide	C10H13N3O2
rimidin-4-y	5810733

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	C10H13N3O2	
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٠	5810733	

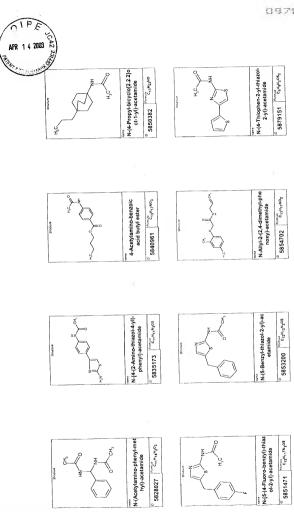
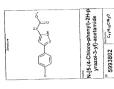


TABLE 15 - 25









N-(4-Furan-2-yl-phenyl)-ace tamide

N-(8-Nitro-2-oxo-2H-chrom en-3-yl)-acetamide

6037721 Formula N203

6039007 C12H11NO2



N-(5-Ethoxymethyl-2-methy I-pyrimidin-4-yl)-acetamide

5968775 Fernand Control 15 No. 2

5940353 C10H12N2C4

3-Acetylamino-5-amino-4-c 5926651 FOUTS 19 CIN203 hloro-benzoic acid



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N-(2-([2-Oxo-1,2-dihydro-in dol-(3Z)-ylidenemethyl]-ami no)-ethyl)-acetamide 6043527 Formus C13H15N3O2

N-(6-Chloro-2-oxo-2H-chro men-3-yl)-acetamide

N-(8-Allyl-2-oxo-2H-chrome 6041610 Comes 14H13N03

n-3-yl)-acetamide

6041848 C4HBGINO3





N-Allyl-2-(4-propyl-phenoxy )-acetamide

N-Allyl-2-(4-isopropyl-phen oxy)-acetamide

6047729 C14H19NO2

6048040

TI U	N-(6-Methoxy-benzothiazol- 2-yl)-acetamide

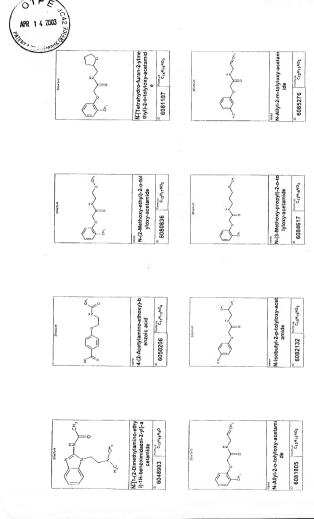
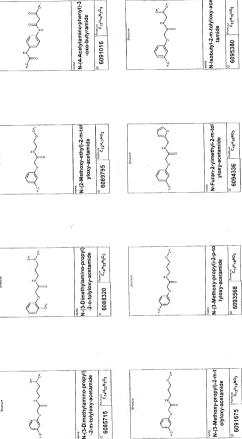


TABLE 15 - 28

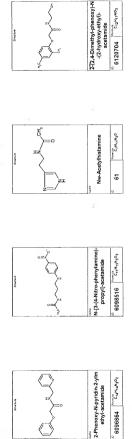


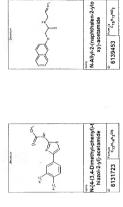












N-[4-(2,5-Dimethyl-phenyl)-t hiazol-2-yl]-acetamide

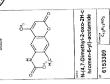
N-(4-Acetylamino-phenyl)-o xalamic acid ethyl ester

6127010 C12H14N2O4

6131496 C13H14N208

TABLE 15 - 30













N-[5-(4-Fluoro-phenyl)-2H-p yrazol-3-yl]-acetamide

N-(4-Methyl-5-p-tolyl-2H-pyr azol-3-yl)-acetamide

6140272 C13H15N30

6143917 C11H10FN30



3-(2-Phenoxy-acetylamino)- propionic acid	C <sub>11</sub> H <sub>13</sub> NO <sub>4</sub>
3-(2-Phenoxy- propior	6239633

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nyl)-2H- tamide	C11H10CIN3O
N-[5-(2-Chloro-phenyl)-2H-p yrazol-3-yl]-acetamide	2_
N-[5-(2-C yrazo	6163418

C11H10CIN3O
163418

C <sub>11</sub> H <sub>1</sub>	
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6163418	
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N-(5-m-Tolyl-2H-pyrazol-3-y

6160287 C12H13N30





C <sub>9</sub> H <sub>8</sub> F <sub>3</sub> NOS	
6368862	





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	3-Acetamidophenol	660 romus c <sub>6</sub> HgNO <sub>2</sub>
OSER	4. 4.	99

C<sub>12</sub>H<sub>17</sub>NO

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Smetare		

N.(1-tert-Butyl-3,4-dimethyl -5-oxo-2,5-dihydro-1H-pyrr ol-2-yl)-acetamide 6326390 Ferral 120 N 202 

N-(2-Trifluoromethylsulfany I-phenyl)-acetamide Contain Contain

6368433

6240978 C13H19N3O2

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Shehm	
	9 <sub>2</sub>

cetamidoacetophenone	C <sub>10</sub> H <sub>11</sub> NO <sub>2</sub>
cetamidos	629

atopnenione	C <sub>10</sub> H <sub>11</sub> NO <sub>2</sub>
cetamidoacetoprienone	629

3-Acetamidoacetophenone	C10H11ND2
3-Acetamido	629

N-(5-Methyl-4-p-tolyl-thiazol -2-yl)-acetamide -6404355
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	0 ± ± €	N-[Acetylamino-(4-dimethyl amino-phenyl)-methyl]-acet
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Smean		lamino-( henyl)-m
	)z-i	[Acety



Shehra	0=\ Z=\ y=\ y=	(2-Chloroacetamido)-4-thi azoleacetic acid	CyHrCIN <sub>2</sub> O <sub>3</sub> S
	, Le	2-(2-Chlore azole	<b>60</b>